

Timmerman



Comptroller General
of the United States

Washington, D.C. 20548

Decision

Matter of: B.F. Goodrich
File: B-235953; B-235953.2
Date: October 31, 1989

DIGEST

Protest that awardee's offer for the development and production of new state-of-the-art aircraft landing gear was materially unbalanced and so grossly front-loaded that contract award will provide awardee with unauthorized contract financing tantamount to improper advance payments is denied where record shows that awardee's prices reflect its reasonable technical approach to the tasks which resulted in its higher development costs early in the project.

2. Allegation that awardee's offer violates the solicitation's integrity of unit prices clause is denied where record shows that awardee's high up-front prices reflect its higher costs.

3. Protest that agency did not conduct cost realism analysis is denied since the solicitation contemplated the award of a fixed-price contract and adequate price competition was attained.

DECISION

B.F. Goodrich Aerospace and Defense Division protests the award of a contract to NASCO Aircraft Brake, Inc., under request for proposals (RFP) No. F42600-87-R-34089, issued by the Air Force for wheel and brake assemblies for the T-38 aircraft. Goodrich asserts that NASCO's offer was materially unbalanced and contains an unacceptably priced warranty. The protester also argues that the agency improperly relaxed technical specifications, improperly evaluated the protester's prices and failed to conduct a cost realism analysis.

We deny the protest.

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The solicitation contemplated the award of a fixed-price contract for redesigned, improved, state-of-the-art wheels and brakes. It called for 526 wheel and brake shipsets and various technical and engineering data items with an option to purchase 284 additional sets.^{1/} The solicitation also required that offerors provide a full wheel and brake performance warranty for a minimum of 10 years. Award was to be made to the technically acceptable offeror whose price was evaluated as representing the lowest total cost of ownership.

The requirement was initially solicited under two-step procedures. The request for technical proposals (RFTP), the first step of the procurement was issued on February 25, 1988. Five offerors submitted technical proposals. All five were determined technically acceptable. An RFP for price proposals based on each offeror's technical approach was subsequently issued on April 5, 1989. Total price based on 16 separate line items was then evaluated for cost of ownership based on a 20-year life cycle cost formula set forth in the solicitation.

NASCO's offer for the 14 basic line items--excluding spare parts--was \$4,995,100. Its cost of ownership was calculated to be \$9,765,704. Goodrich's offer for the same line items was \$7,472,930; its ownership cost was \$16,376,499.59. On June 14, the contracting officer awarded the contract to NASCO as the lowest priced technically acceptable offeror.

Goodrich contends that NASCO's proposal is materially unbalanced because it grossly front-loads the prices for the first two line items. In particular, the protester objects to the portion of prices for these items which represent the cost of that firm's warranty for these items. According to the protester, NASCO's warranty prices exceed its already high performance prices for these items and improperly include costs for such things as testing. Goodrich contends that NASCO's pricing scheme results in an improper advance payment to that firm which gave it an unfair competitive advantage over other offerors.

The agency disagrees. It contends that NASCO's prices properly reflected its costs and a reasonable warranty scheme since a state-of-the-art design for a part as complex as a wheel and brake assembly will involve substantial nonrecurring costs such as engineering, testing, design and

^{1/} A shipset is a set of the components required for one aircraft and consists of two wheel assemblies and two brake assemblies.

evaluation under the first part of the contract. Further, according to the awardee, the majority of its warranty costs were included in its design and development efforts represented by the first two line items. Finally, the Air Force asserts that in any event, acceptance of NASCO's proposal will result in the lowest overall cost to the government by a substantial margin.

The solicitation required offerors to warrant the assemblies furnished under the contract. The RFP price schedule did not include among its 16 line items any separate line item representing warranty prices. Nevertheless, the proposed warranty set forth at section H-910 of the solicitation did include a schedule where offerors were to break out the portions of their applicable line item prices attributable to the required warranties. This break out was not to be considered in determining the low offeror but was to be used separately to determine whether the potential awardee's warranty was cost effective. Goodrich's challenge to NASCO's pricing scheme is two-fold. On the one hand, the protester argues that NASCO's first two line item prices including the warranty portion of those prices are much too high and cause its offer to be grossly front-loaded. In support of this position, the protester cites the large part of these prices which represent NASCO's warranty for these items as the prime example of a price not supported by a legitimate underlying expense. On the other hand, the protester also maintains that the pricing of the warranty itself is unreasonably loaded onto these two line items and, accordingly, is not cost effective and thus the warranty itself is unacceptable which should have independently resulted in the rejection of the NASCO offer.

Although the concept of unbalancing or front-loading generally applies to sealed bidding, it also may apply to negotiated procurements where, as here, cost or price constitutes a primary basis for source selection. tg Bauer Assocs., Inc., B-228485, Dec. 22, 1987, 87-2 CPD ¶ 618. An offer is materially unbalanced if it is based on nominal prices for some of the work and enhanced prices for other work and there is reasonable doubt that an award based on the offer will result in the lowest overall cost to the government. Semcor, Inc., B-227050, Aug. 20, 1987, 87-2 CPD ¶ 185. Here, there is nothing in the record to suggest that an award to NASCO would not result in the lowest cost to the government.

However, we have held that a low offer that is unbalanced in the extreme should be rejected if payments made under a contract awarded pursuant to such an offer would amount to

improper advance payments. Canaveral Maritime, Inc., B-231857.4 et al., May 22, 1989, 89-1 CPD ¶ 484. Where an offer is so grossly front-loaded that its initial price is far in excess of the actual value of the items or services to be provided, payment under the contract would be tantamount to prohibited advance payments. See 31 U.S.C. § 3324(a) (1982). An assessment of whether an offer is improperly front-loaded turns on the question of whether the pricing structure is reasonably related to the actual costs to be incurred. By necessity, therefore, our decisions allow offerors to explain the costs behind their pricing structures. Canaveral Maritime, Inc., B-231857, supra.

We do not think that NASCO's pricing is so grossly front-loaded as to provide that firm with payments which are tantamount to advance payments.

The awardee priced line item 001 at \$1,500,000 2/ and line item 002 at \$500,000. 3/ Line item 001 was for the design, development and trial installation of the improved state-of-the-art wheels and brakes. Line item 002 was for dynamometer testing of a shipset and for a fully tested shipset. The other three line items that were most significant in terms of cost were line items 003, 004 and 014. Line item 003 was for the production of 226 shipsets, line item 004 was for the production of 300 shipsets, and line item 014 was for an option for 284 shipsets. NASCO priced these line items at \$804,560, \$1,068,000 and \$1,011,080. Goodrich priced the first line item at "no charge" the second at \$8,474 and the three production line items at \$1,966,200, \$2,748,000 and \$2,750,256. 4/

Although the awardee's prices are indeed significantly higher than Goodrich's and the other offerors' for line items 001 and 002, this fact alone does not necessarily establish that NASCO's prices do not reflect its actual cost of the research and engineering work needed to perform the item 001 and 002 tasks plus a proportionate share of the profit or that the government is receiving nothing of value

2/ According to the warranty clause in NASCO's offer the portion of this price attributable to the warranty was \$800,000.

3/ According to NASCO's warranty clause the portion of this price attributable to the warranty was \$300,000.

4/ For reasons that are not explained, Goodrich failed to include in its offer the required warranty cost breakdown.

as a result of these expenses. NASCO has submitted extensive documentation of its costs including the work papers it used to price the line items. In general, the information shows that since the firm has not before developed and manufactured a complete wheel and brake assembly, it plans to focus the major portion of its total effort on the design, project engineering and manufacturing engineering stages represented by line item 001. These efforts will be represented by the model it supplies in the trial installation kit to be provided under this line item. According to the awardee, this work is directly related to NASCO's proposal to warrant the assemblies for 15 years, 5 years longer than required. In this respect, NASCO explains that its warranty plan and the resultant large portion of its warranty cost which was attributable to this line item and also to line item 002 was based on the firm's decision to spend sufficient time and money on the design and testing of the assembly to ensure that the resulting manufactured product would meet the warranty requirements. This strategy is in contrast to others which may be based on the allocation of the warranty cost to the manufacturing process or to merely providing a resource cost pool with which to replace defective assemblies.

Line item 002 is for the dynamometer testing of a "proof kit" and the supply of such a kit to the Air Force for trial installation. Here, NASCO has supplied similar documentation which in its view justifies its rather high price for this item. Again, these expenses reflect the awardee's philosophy of expending time and effort and warranty resources on the pre-production aspects of the project--in this instance--testing in order to reduce defects in the later production phase.

Similarly, NASCO has documented the basis for its relatively low production prices for line items 003 and 004. In this regard, the awardee states that its low warranty costs for these items reflect its plan to increase the reliability and therefore reduce its warranty liability by an extensive design and test effort. NASCO maintains that careful assembly along with extensive quality control of a well designed and thoroughly tested item will result in few defects.

In most of the instances where we have upheld an agency's rejection of a bid or offer or have recommended that an agency take such action because of front-loading, the solicitations provided for first articles and production items where production was to be already developed items

and the first articles were used to ensure that items conforming to the solicitation requirements would be furnished upon the commencement of full production. See, e.g., Riverport Indus., Inc., 64 Comp. Gen. 441 (1985), 85-1 CPD ¶ 364, aff'd on reconsideration, B-218656.2, July 31, 1985, 85-2 CPD ¶ 108; Nebraska Aluminum Castings, Inc., B-222476, June 24, 1986, 86-1 CPD ¶ 582, aff'd on reconsideration, B-222476.2, Sept. 23, 1986, 86-2 CPD ¶ 335. M.C. General, Inc., B-228334, Dec. 9, 1987, 87-2 CPD ¶ 572.

The procurement here is much more complex. It involves the development of a new, never before produced state-of-the-art brake and wheel assembly. In addition, there is the further requirement that the resultant product of the development effort be warranted for at least 10 years.^{5/} Development projects such as these lend themselves to varying approaches which may legitimately result in the incurrence of costs at different steps. In this instance, NASCO has formulated a plan for the development of the new components and for their warranty which calls for a considerable initial engineering effort and it has provided documentation which indicates that it will indeed incur significant expense at an early stage. It is also significant that the RFP has allocated a line item for the development effort and includes no instructions or prohibition against recovering development costs at the time they are incurred. This development effort is represented by the trial installation kit the agency receives under line item 001 and the kit proof kit it receives under line item 002, both tangible products that the agency acquires as a result of the protester's extensive early engineering effort. Under these circumstances, where the agency concludes that it was reasonable for an offeror such as NASCO to incur significant expenses early in the project and those expenses are documented and explained by the offeror we do not think rejection of NASCO's offer is required. Our usual concern about improper front-loading--that the offeror is charging the government for costs that should be borne by other line items--simply is inapplicable where development effort is involved, where the government appears to pay separately for development culminating in the production of a model and for subsequent testing, and where vendors have some discretion in deciding how to structure their overall approach. Accordingly, we do not believe that the agency acted unreasonably by accepting NASCO's offer.

^{5/} It is clear that the effort required for the early development and testing represented by the first two line items is not at all similar to the production of the assemblies represented by the later line items.

The protester also alleges that NASCO's pricing violated the solicitation's integrity of unit prices provision, as set forth at Federal Acquisition Regulation (FAR) § 52.215-26. This clause requires that bidders distribute costs within contracts on a basis that assures that unit prices are in proportion to actual costs and prohibits methods of distributing costs to line items that distort unit prices. In this case, that analysis is substantially the same as the above analysis concerning unbalancing or front-loading. See Northwest Cleaning Servs., B-234780, May 31, 1989, 89-1 CPD ¶ 523. Since we have already found that NASCO has justified its prices including the portion which pertained to the warranty for line items 001 and 002 on the basis of its actual costs, we do not find that NASCO's offer violated the RFP's integrity of unit price provisions.

The protester next separately objects to the agency's acceptance of NASCO's warranty even though that firm allocated almost all of its cost to line items 001 and 002.

The cost benefit analysis of NASCO's warranty^{6/} was conducted by Hill Air Force Base's Comptroller's Office and while that office found that the warranty did not "appear to be cost effective," the Comptroller's Office nevertheless found NASCO's proposal, including the warranty package to be the most advantageous to the government, considering all of the factors comprising the total cost of ownership of the brake and wheel assemblies, including NASCO's proposal of a 15-year warranty instead of the minimum 10-year one required, and the fact that its overall price was several million dollars less than the nearest competitor.

Goodrich argues that the Comptroller's finding that NASCO's warranty was not cost effective proves NASCO's offer is unbalanced since the price of the warranty exceeds its value. As explained earlier in our analysis of NASCO's prices for line items 001 and 002 which carry most of the warranty cost, that firm has explained and documented its high development costs and their relationship to the warranty scheme. We have no basis upon which to legally object to this scheme.

^{6/} The Air Force conducted a cost benefit analysis only on NASCO's warranty since it was the lowest priced technically acceptable offeror.

Regarding the Comptroller's determination that NASCO's warranty itself did not appear to be cost effective, that finding was tempered by the Comptroller's overall conclusion that NASCO's proposal was the most advantageous to the government. The protester cites Defense Federal Acquisition Regulation Supplement § 246.770-8 and Air Force Federal Acquisition Regulation Supplement § 46.702 for the proposition that under these circumstances, the acceptance of NASCO's warranty was improper and unfair to Goodrich. The cited regulations instruct agency evaluators how to evaluate the warranties but they do not require the rejection of a proposal because it contains a warranty that may not be cost effective. Further, we do not understand how the acceptance of this warranty is unfair to Goodrich when that firm did not include the separate warranty costs in its proposal so that a similar cost analysis of its warranty could be performed.

Goodrich next argues that the Air Force improperly relaxed specifications concerning the warranty without issuing an amendment notifying all offerors. Specifically Goodrich argues that the Air Force's evaluation of NASCO's warranty was based on a projected aircraft landing frequency which was less than the number of landings covered by NASCO's 15-year warranty. This according to the protester, made NASCO's warranty appear more cost effective than it actually is.

The method to be used in evaluating the cost effectiveness of warranties was not set forth in the solicitation. It appears from the record that the Air Force calculated the cost effectiveness of the warranty based on projected landings over the required 10-year period of the warranty rather than over the 15-year period actually covered by NASCO's warranty. We do not think that this conservative approach of using the minimum requirements was improper or unreasonable. We do not understand, nor does the protester explain how this constitutes a waiver of a solicitation requirement. Similarly, the protester has not chosen to explain how the Air Force's methodology "dramatically affected" the reasonableness evaluation. Thus, we see no merit in this argument.

The protester takes issue with numerous clauses in NASCO's warranty, asserting that they are ambiguous and render the warranty unenforceable. One of Goodrich's objections; its argument concerning the language in NASCO's performance warranty of the brake stacks, relates to wording that was taken directly from the warranty language proposed in the RFTP. We find the objection to be untimely since it

involves an apparent solicitation defect which should have been raised prior to the solicitation's closing date. See Bid Protest Regulations, 4 C.F.R. § 21.2(a)(1) (1989).

Goodrich argues that NASCO's warranty is inconsistent and ambiguous because although it included line item 001 in its warranty pricing, it did not include that line item in the language of the warranty itself. We do not see any inconsistency. Nothing that is delivered under line item 001 is subject to the warranty. NASCO's warranty plainly attaches to the actual products delivered under the other line items.

Goodrich further objects to language in NASCO's warranty which provides "any wheel or brake assembly which is expended prior to the fifth scheduled overhaul, provided there were no failure between overhauls, will be considered to be a defect subject to this warranty." The protester argues that this language indicates that failures occurring between overhauls prior to the fifth scheduled overhaul are not covered by the warranty. The Air Force responds that this language means only that an unscheduled overhaul caused by failures counts as one of the five warranted overhauls.

We agree with the protester that this language is not, taken by itself, particularly clear. However, when used in the context of the entire clause which refers to failures between overhauls, we think the Air Force's interpretation is more reasonable.

Goodrich also argues that NASCO's use of the term "manufacturing defect" in its warranty is ambiguous since that term is not defined. In our view, the term "manufacturing defects" has a usual and customary meaning that is sufficient to avoid a finding of ambiguity here.

The protester states that NASCO's warranty is ambiguous because it excludes certain components of the wheel and brake assembly such as seals and O-rings from the overall wheel and brake warranties. The Air Force responds that it never expected the contractor to warrant these components for the same period as it warranted the wheel halves and brake housing. Since these components were not required by the solicitation to be covered in the warranty for the wheel halves and brake housing, we find nothing inconsistent in NASCO's specific exclusion of them from its warranty.

Goodrich also maintains that a clause in the remedies section of NASCO's warranty is in violation of numerous fiscal law provisions. The clause states: "The contractor may provide equivalent monetary value in the form of spare

parts to the Air Force for other programs as agreed upon by the government and the contractor as adjustment for costs incurred by the government." According to Goodrich, this clause contemplates that funds obligated to this contract will improperly be expended on other contracts.

The Air Force maintains that no violation has occurred and that the agency will comply with all applicable laws in the event it chooses to take advantage of this clause.

This clause gives the Air Force an option in addition to the required remedies that it may exercise in the event of a warranted part defect. Since the warranty meets the solicitation requirement in respect to the remedies offered the additional terms have no impact on whether the warranty or the proposal which it is a part of is acceptable.

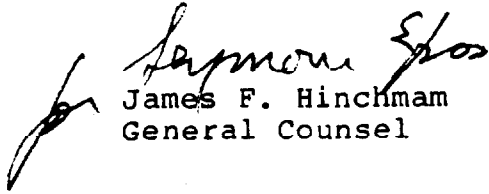
Goodrich also complains that the Air Force did not conduct a cost realism analysis as required by Federal Acquisition Regulation § 15.608. Goodrich contends that such a cost analysis is especially important here where the prices of one offeror are significantly lower than those of the other competitors. Where, as here, the solicitation contemplates the award of a fixed-price contract, performance of a cost analysis is not required where adequate price competition is attained. See Contract Servs., Inc., B-232689, Jan. 23, 1989, 89-1 CPD ¶ 54.

Goodrich finally contends that the Air Force improperly increased its proposed costs. Goodrich offered two-tier pricing for spare parts; its tier-two prices were slightly higher than its tier-one prices based on an assumption that the spares would be ordered at a later time than under tier one. The Air Force used only the tier-two prices in determining Goodrich's price for spares because it believes that price to be more realistic based on its view that the spare parts would most likely be ordered during the later period covered by tier-two. Even if we found that the agency's assumption was incorrect--which we do not--and that only Goodrich's lower tier-one prices should have been used, NASCO's overall price is still lower by a substantial margin. There is consequently no possible prejudice to Goodrich in this regard.

We have carefully reviewed the record here including NASCO's offer, the agency's evaluation record and all of the protester's varied arguments and find no legal basis upon

which to object to the agency's selection of NASCO as the low acceptable offer.

The protest is denied.



James F. Hinchman
General Counsel